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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/558,363

11/25/2005

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KON-2053

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EXAMINER

HON, SOW FUN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/558,363	<b>Applicant(s)</b> OKUBO ET AL.	
	<b>Examiner</b> SOPHIE HON	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

***Withdrawn Rejection***

1. The 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejection of claim 6 is withdrawn due to Applicant's amendment dated 12/02/08.

***Response to Request for Reconsideration***

***Repeated Rejections***

2. The 35 U.S.C. 103(a) rejections of claims 1-21 over Yamada in view of Maeda as the primary combination of references are repeated for the same reasons previously of record in the Office action dated 09/03/08.

***Response to Arguments***

3. Applicant's arguments have been fully considered but they are not persuasive.
4. Applicant argues that Yamada is silent with respect to plasticizer and does not teach if plasticizers should or should not be used, while Machell specifically teaches that 6 to 20% is used, [which is outside the claimed range of less than 1%].

Applicant is respectfully apprised that Yamada is the primary reference that teaches the cellulose ester-containing composition of the transparent film for display substrate, which does not contain any plasticizer, where the transparent film is drawn 6 percent (factor of 1.06, [0110]) in a lateral direction (transverse, [0110]), which is within the claimed range of 3 through 100 percent. Machell is the secondary reference that

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teaches that a transparent film containing a cellulose ester is drawn from 50 to 100 percent (stretch ratio in both directions, column 10, lines 5-17), which is within the claimed range of 3 through 100 percent, in both the lateral direction and in the conveyance direction (transverse direction and direction of travel of the web, column 10, lines 5-11), for the purpose of providing the desired superior surface properties (column 10, lines 29-45) which include surface smoothness and optical uniformity as well as dimensional stability (column 2, lines 25-32) suited for a transparent film for optical substrate (photographic film support, column 2, lines 5-15).

To summarize, Machell teaches that the transparent film of Yamada, needs to additionally be drawn in the conveyance direction and not just in the lateral direction, in order to obtain superior surface smoothness and optical uniformity, as befits a transparent film for an optical substrate of which the display substrate of Yamada is a species. The modification by Machell thus provides an improvement to the transparent film for optical display substrate of Yamada.

As such, the prior art rejections over Yamada, as modified by Machell, stand.

5. Applicant argues that it is improper [in the product claims] to combine Machell and Yamada since they are directed to different methods for making cellulose ester film, where Yamada teaches a solution cast method, and Machell teaches a melt cast method [and are thus non-analogous art].

Applicant is respectfully apprised that the final product is the cellulose ester-containing transparent film. Both Yamada and Machell are directed to cellulose ester-containing transparent films and are thus analogous art. As stated above, Yamada is

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the primary reference that teaches the cellulose ester-containing transparent film composition that does not contain any plasticizer, where the transparent film is drawn in a lateral direction. Machell is the second reference that teaches that a cellulose ester-containing transparent film needs to additionally be drawn in the conveyance direction, not just in the lateral direction, in order to obtain superior surface smoothness and optical uniformity, as befits a transparent film for an optical substrate, of which the display substrate of Yamada is a species. The modification by Machell thus provides an improvement to the transparent film for optical display substrate of Yamada.

6. Applicant argues that it is improper [in the method claims] to combine Machell and Yamada since they are directed to different methods for making cellulose ester film, where Yamada teaches a solution cast method, and Machell teaches a melt cast method [and are thus non-analogous art].

Applicant is respectfully apprised Yamada is the primary reference that teaches the method for manufacturing a transparent film for display substrate (displaying element, [0001]) according to a casting film forming method comprising the steps of: casting the dope ([0111]) containing: a cellulose ester, and no plasticizer (acetate propionate, [0110]) i.e. in a zero amount which is within the claimed range of less than 1 percent, onto a casting support member to form a web (cast onto a stainless steel belt, [0111]). Yamada teaches the step of drawing the formed web (factor of 1.06, [0110]) in a width direction (transverse, [0110-0111]). Yamada fails to teach that the web is also drawn in a conveyance direction. Machell is the secondary reference that teaches that in the drawing step, the formed web of a cellulose ester-containing transparent film

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needs to be drawn not just in the width direction, but also in the conveyance direction (transverse direction and direction of travel of the web, column 10, lines 5-11), for the purpose of providing the desired superior surface properties (column 10, lines 29-45) which include surface smoothness and optical uniformity as well as dimensional stability (column 2, lines 25-32) suited for a transparent film for optical substrate (photographic film support, column 2, lines 5-15).

To summarize, the modification made by Machell is to the drawing step of the already formed web in the method for manufacturing the transparent film of Yamada, where both Machell and Yamada are directed to the post-treatment of an already formed web, and are thus analogous art. Machell teaches that the drawing step in the method for manufacturing the transparent film of Yamada, needs to include the drawing of the formed web in the conveyance direction and not just the drawing of the formed web in the lateral direction, in order to obtain a transparent film with superior surface smoothness and optical uniformity, as befits a transparent film for an optical substrate, of which the display substrate of Yamada is a species. The modification by Machell thus provides an improvement to the post-treatment step of the already formed web in the method of manufacturing the transparent film for optical display substrate of Yamada.

7. Applicant argues that neither Yamada nor Machell would lead one of skill in the art to provide high Tg and low linear coefficient as shown in Table 1 of Applicant's specification.

Applicant is respectfully apprised that Ota is the secondary reference that teaches that a display substrate requires a glass-transition temperature within a range of 150 degrees Celsius or more (abstract), which contains the claimed range of 180 degrees Celsius or more, and requires a coefficient of linear expansion within a range of 80 ppm/degrees Celsius or less (abstract) in both MD and TD directions, which contains the claimed range of from 5 through 50, for the purpose of providing the desired dimensional stability during processing or use (substrate film, column 1, lines 13-17).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sophie Hon/

Examiner, Art Unit 1794

/KEITH D. HENDRICKS/  
Supervisory Patent Examiner, Art Unit 1794